

Description of quality

Kaufmann K1 concrete formwork panels are manufactured in accordance with Austrian standard B 3023 "solid wood panels, 3-ply concrete formwork panels – types and requirements":

I. Quality specifications for the outer layers of 3-ply concrete formwork panels

Lamella widths

minimum: 30 mm
maximum: 45 mm

Wood types

Spruce (picea), fir (abies); a mixture of wood types is permitted

Edge finish of the lamella

Parallel or conically sawn and sharp-edged. Little wane is permitted on the side facing the intermediate layer, provided they do not extend over the entire length

Surface

The top layers must be smooth (GL) or textured (STR) prior to surface tem-

pering. The individual small boards of the top layer need to be arranged tightly next to one another. Isolated seams up to 500 mm in length and 1 mm in width are permitted, if they are filled in with the surface coating

Plugs

Plugs may be used for repairing wooden defects. The plugs must be carefully processed and glued well. Plug size: max. 40 mm in diameter. A maximum of 15 plugs is permitted per m² and side

Glueing

Glueing between the top and intermediate layers must be in accordance

with the requirements outlined in section 4.4

Knots

Knots up to 20 x 40 mm are permitted; healthy, intergrown knots up to 40 x 80 mm. Isolated knot holes up to 5 mm in diameter are permitted (up to 10 mm for type STR)

Discolouration, fungal infestation

Discolouration up to a maximum of 20 % of the surface per side is permitted. Decay is not permitted

Compression wood

Strips of light compression wood are permitted

Splits

Splits with a maximum gradient of 1:10 to 1 mm in width and up to 500 mm in length are permitted. They must be filled in with the surface coat (with the exception of type STR)

Pitch pockets

Pitch pockets up to a max. of 5 x 50 mm are permitted (for type STR: max. 10 x 100 mm)

Ring shake

Not permitted

Insect infestation, worm holes

Insect infestation is not permitted; isolated small worm holes are permitted

II. Quality specifications for the intermediate layer of 3-ply concrete formwork panels



Width

Maximum width of strips or lamellas: 50 mm

Wood types

Spruce (picea), fir (abies), pine (pinus), larch (larix); a mixture of wood types is permitted

Edge finish

The edges are virtually

sharp-edged at the ends and at the long side of the panels. Isolated rough edges up to 5 mm are permitted in the covered areas

Discolouration, fungal infestation

Discolouration is permitted, decay is not permitted

Technical specifications

Product

- 3-ply solid wood panel made of high grade spruce laminations with melamine coating
- Pursuant to Austrian standard B 3023 "Solid wood panels"

Types of wood

- Spruce, fir, a mixture of wood species permitted

Glueing

- Veneer board 100 (AW 100) pursuant to Austrian standard B 3023

Wood moisture

- Approximately 12% +/- 3% at the time of delivery

Layout

- Manufactured as jumbo format panels; smaller formats are cut to exact specifications from jumbo formats
- Locked, glued crosswise
- Fully enclosed, laminated top and intermediate layers, no concealed edge bands
- Top layers predominantly showing vertical growth rings, no clamps
- seamlessly glued inter-

mediate layer, ensures that the longitudinal edges do not tear off

- Seamlessly sanded
- Resistant melamine coating
- Water repellent edge seal

Standard formats

Length x width in cm	
100 x 50	
150 x 50	
200 x 50	100
250 x 50	100
300 x 50	100

Jumbo formats

Length x width in cm				
400 x 50	100	150	200	
500 x 50	100	150	200	
600 x 50	100	150	200	

Thicknesses

- 21 and 27 mm

Surface quality

- Seamlessly sanded surfaces
- Resistant melamine coating of approximately 130 g per m² and side

Edge seal

- Water repellent formwork edge finish
- PU edge seal



Weight

- 21 mm: approx. 10,5 kg/m²
- 27 mm: approx. 12,5 kg/m²

Packaging

- Packages: 50 pieces of 21 mm and

40 pieces of 27 mm thickness

- Delivered suitable for the construction site, protected by integrated supporting timber
- Upon request, the packages will be wrapped in plastic foil. A surcharge applies.
- The package units for jumbo formats are subject to arrangement

Dimensional tolerances

pursuant to Austrian standard B 3023

Thicknesses	21 and 27 mm	+/- 1 mm
Lengths	100 ≤ 250 cm	+/- 1 mm
	300 ≤ 600 cm	+/- 2 mm
Widths	50 ≤ 200 cm	+/- 1 mm
Longitudinal curvature	100 ≤ 300 cm	+/- 1 mm
	301 ≤ 600 cm	+/- 1,5 mm
	Widths of < 50 cm	+/- 1 ‰

Permissible tensions

Minimum value pursuant to Austrian standard B 3023

Thicknesses	Bending strength	Bending modulus E
21 mm	40 N/mm ²	8.000 N/mm ²
27 mm	35 N/mm ²	7.200 N/mm ²



The special **PU-edge seal** prevents the penetration of moisture and adherence of concrete sludge on the edge of the panel

Almost no checks thanks to the narrow lamella widths used for the edge-glued **outer panels**, not even after multiple uses

Thanks to the continuous **intermediate layers**, the **longitudinal edges** do not wear out, not even as a result of heavy mechanical strains

The entire **surface** is fully sanded and coated with a resistant melamine resin. It provides an ideal pore structure and guarantees the unique appearance of the concrete.



The Kaufmann K1 formwork panel is a high-quality, 3-ply laminated solid wood panel used for concrete formwork constructions. K1 stands for superior quality and durability. The K1 panel is manufactured in thicknesses of 21 and 27 mm at a jumbo size of 2 x 6 m. It is available in the common formats, with a width of 50 cm and lengths of between 100 to 300 cm. The enclosed, laminated top and intermediate layers (no concealed edge bands) showing primarily vertical growth rings make for the typical clean concrete appearance of the K1 panel - time and time again.